

**Common Sense Initiative, Automobile Manufacturing Sector**

***U.S. Automobile Assembly Plants and Their Communities:  
Environmental Economic, and Demographic Profile***

**Part III: Automobile/Light Duty Truck Assembly  
Plant-Community Profiles**

**3. General Motors  
Wilmington, DE**

**December 1997**

## **Contents and Guidelines for Use**

**Users of this profile should carefully review the description of methods, data limitations, and guidelines for use and interpretation of the data presented in Part I of the report.**

### **Contents:**

Plant Locations (National and Michigan maps)  
Plant Location, Database Identification Numbers, 1994 Production and Employment  
1991 and 1993 RCRA Biennial Report Summary  
1991-1994 TRI Releases and Transfers Summary  
1994 TRI Releases and Transfers by Chemical  
1991-1994 Volatile Organic Compound and Nitrogen Oxide Emissions  
1994 Summary of TRI Chemical Releases and Transfers from Sources within 3 Miles of Assembly Plant  
Air Quality Attainment Status for Criteria Pollutants (as of 1994)  
Community Demographic and Economic Characteristics  
Facility Location (map)  
Area Wide 1994 TRI Emission Profile (map)  
1994 TRI Releases and Transfers from Sources within 3 Miles of Assembly Plant, by Chemical  
Demographic Characteristics (maps)

### **General Guidelines for Use**

Efforts have been made to ensure that the data presented here are accurate. The Project Team could not independently verify data accuracy in all cases, however, and some errors may remain. The following is a partial list of factors that should be considered in using these profiles:

1. Current releases presented in this report represent only some of the contamination sources in a given area. Data on historical releases (prior to 1991) were not included, and releases from non-assembly plant emission sources were identified only through the Toxics Release Inventory (TRI). TRI data do not cover all sources of releases. Considering only TRI data for a given community may mis-state the relative contribution of plants and their neighboring TRI facilities to an area's total releases.
2. Care must be taken to distinguish true changes over time in environmental releases from apparent changes, due, for example, to changes in the scope of reporting requirements.
3. TRI data are often based on engineering estimates and are reported on an annual basis. Data on releases over shorter time frames are not available.
4. TRI, the Biennial Report and other databases do not include all substances and environmental releases of concern.

### **Notes on Comparisons Across Facilities**

1. The following factors can affect an assembly plant's environmental profile, among other things: the number of vehicles produced, plant age, process equipment age, and vehicle size and configuration.
2. Some plants are highly-integrated, performing some parts and all assembly steps in-house. Others obtain parts from other manufacturing facilities, or share assembly operations with another plant.
3. States differ in how they define hazardous waste and how they treat recycled wastes and small quantity generators. Therefore, data on quantities of BRS wastes generated may not be comparable for plants located in different states.
4. Area-wide averages for economic and demographic characteristics may be better or worse measures of the plant's immediate community, depending on the specific location of a plant within the reporting area.

**Plant-Community Profile:  
General Motors  
Wilmington DE**

12/2/97

<b>LOCATION</b>	Address	Boxwood & Dodson Rds., Wilmington DE 19804		<b>DESCRIPTION</b>	Produced Chevrolet Corsica and Baretta in 1994.	
	Lat/Long:	latitude (degrees N)	39 43' 29"			
		longitude (degrees W)	75 36' 32"			
	County:	New Castle	MSA: Wilmington-Newark DE-MD	<b>ID NUMBERS</b>	RCRA ID	DED002369205
	Other counties within 3 miles of plant:		none		AIRS ID	AFS1000300015
					NPDES ID	DE0000523
					TRI	19899CPCWLPOBOX
<b>OPERATIONS</b>		<b>Production</b>	<b>Employment</b>			
Calendar Year: 1991		171,933				
1992		187,441				
1993		202,654				
1994		230,925	3,104			

**PLANT ENVIRONMENTAL PROFILE**

**RCRA BIENNIAL REPORT**

<i>Waste Code(s)</i>	<i>Wastewater?</i>	<i>Physical Form</i>	<i>Source</i>	<i>Mgd. On/Off-Site</i>	<i>Management Method</i>	<i>Quantity Generated (tons)</i>	<i>Quantity Shipped (tons)</i>	<i>Quantity Mgd. On-Site (tons)</i>
<i>1991</i>								
D001 (ignitable)	N	B203 org. liquids	A21 painting	Off	M041 incineration	21.7	21.7	0.0
D001(ignit) D018 (benzene) D039	N	B204 org. liquids	A04 flush rinsing	Off	M029 solvents recov.	5.4	5.4	0.0
D008 (lead)	N	B319 inorg. solids	A21 painting	Off	M041 incineration	2.4	2.4	0.0
D008 (lead)	N	B504 inorg. sludges	A75 wastewater trt	Off	M132 landfill	552.0	552.8	0.0
F003 (nonhalog. solvents)	N	B203 org. liquids	A21 painting	Off	M029 solvents recov.	742.9	721.7	0.0
F003 (nonhalog. solvents)	N	B203 org. liquids	A21 painting	Off	M041 incineration	123.7	123.7	0.0
<b>TOTAL - 1991</b>						<b>1,448.1</b>	<b>1,427.7</b>	<b>0.0</b>
<i>1993</i>								
D001 (ignitable)	N	B203 org. liquid	A21 painting	Off	M041 incineration	10.0	10.0	0.0
D001(ignitable) D018 (benzene)	Y	B102 inorg liquid	A04 flush rinsing	Off	M041 incineration	0.2	0.2	0.0
D001, D018, D039	N	B204 org. liquid	A04 flush rinsing	Off	M029 solvents recov.	7.2	7.2	0.0
D002 (corrosive)	Y	B105 inorg liquid	A02 acid cleaning	On	M121 neutralization	1,042.5	0.0	1,042.5
D002 (corrosive) D008 (lead)	N	B309 inorg. solids	A59 1x/intermittent	Off	M013 metals recov.	0.1	0.1	0.0
D008 (lead)	Y	B113 inorg liquid	A06 spray rinsing	On	M077 aqueous treat.	32,101.8	0.0	31,926.6
D008 (lead)	N	B310 inorg. solids	A32 product filtering	Off	M132 landfill	16.5	16.5	0.0
F003 (non-halog solvents)	N	B203 org. liquid	A21 painting	Off	M041 incineration	90.1	90.2	0.0
F003, D035	N	B203 org. liquid	A09 clean out equip	Off	M029 solvents recov.	909.5	909.5	0.0
<b>TOTAL - 1993</b>						<b>34,177.9</b>	<b>1,033.7</b>	<b>32,969.1</b>

**TOXICS RELEASE INVENTORY**

	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Energy Recovery</i>	<i>Off-Site Recycling</i>	<i>Off-Site Treatment</i>	<i>Off-Site Disposal</i>	<i>Total Transfers</i>
<b>Total lbs of TRI chemicals:</b>									
1991	107,495	521,158	628,653	0	0	886,368	53,606	0	939,974
1992	108,099	566,722	674,821	0	0	769,183	62,399	0	831,582
1993	232,181	594,040	826,221	0	0	1,205,934	343,345	26,455	1,575,734
1994	18,371	1,267,199	1,285,570	0	0	1,033,516	174,079	2,557	1,210,152
<b>Lbs. per vehicle produced:</b>									
1991	0.63	3.03	3.66	0.00	0.00	5.16	0.31	0.00	5.47
1992	0.58	3.02	3.60	0.00	0.00	4.10	0.33	0.00	4.44
1993	1.15	2.93	4.08	0.00	0.00	5.95	1.69	0.13	7.78
1994	0.08	5.49	5.57	0.00	0.00	4.48	0.75	0.01	5.24

Plant-Community Profile:  
General Motors  
Wilmington DE

12/2/97

PLANT ENVIRONMENTAL PROFILE (continued)

1994 TRI Emissions/Releases by Chemical (lbs.)

<i>Chemical Name</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Energy Recovery</i>	<i>Off-Site Recycling</i>	<i>Off-Site Treatment</i>	<i>Off-Site Disposal</i>	<i>Total Transfers</i>
METHANOL	2,810	58,727	61,537	0	0	6,885	0	0	6,885
N-BUTYL ALCOHOL	311	92,467	92,778	0	0	16,879	100,881	0	117,760
BENZENE	59	0	59	0	0	0	5	0	5
METHYL ETHYL KETONE	2,908	63,436	66,344	0	0	56,911	270	0	57,181
ETHYLBENZENE	0	69,414	69,414	0	0	110,971	0	0	110,971
ETHYLENE GLYCOL	50	4,320	4,370	0	0	0	0	0	0
METHYL ISOBUTYL KETONE	513	195,395	195,908	0	0	269,501	0	0	269,501
TOLUENE	8,349	34,504	42,853	0	0	48,598	72,269	0	120,867
XYLENE (MIXED ISOMERS)	3,371	748,936	752,307	0	0	523,771	654	0	524,425
LEAD COMPOUNDS	0	0	0	0	0	0	0	2,557	2,557
<b>TOTAL</b>	<b>18,371</b>	<b>1,267,199</b>	<b>1,285,570</b>	<b>0</b>	<b>0</b>	<b>1,033,516</b>	<b>174,079</b>	<b>2,557</b>	<b>1,210,152</b>

VOC/NOx Emissions:  
(lbs/year)

	<i>VOCs</i>	<i>NOx</i>
1990	1,398,000	164,000
1991	NA	NA
1992	1,394,000	164,000
1993	1,788,000	234,000
1994	2,404,000	244,000

**Plant-Community Profile:  
General Motors  
Wilmington DE**

12/2/97

---

**COMMUNITY ENVIRONMENTAL PROFILE**

**TRI Chemical Releases & Transfers from Sources Within 3 Miles of Auto/LDT Plant (lbs.)**

<i>Facility (w. map #)</i>	<i>Air-Fugitive Emissions</i>	<i>Air-Stack Emissions</i>	<i>Total Releases</i>	<i>Discharge to POTW</i>	<i>Off-Site Transfers</i>	<i>Total Transfers</i>
1 HERCULES INC. RESEARCH CENTER	81	1,503	1,584	0	52,845	52,845
2 GATES ENG. CO. INC. INC.	0	0	0	0	0	0
3 KAUMAGRAPH CORP.	0	0	0	0	0	0
4 DU PONT EDL WILMINGTON SHOPS E	0	0	0	0	0	0
5 AMETEK INC. HAVEG DIV.	122	134	256	7	0	7
7 MEDAL LP	0	22,400	22,400	0	37,800	37,800
8 CIBA-GEIGY CORP. PIGMENTS DIV.	107,194	14,496	121,690	2,156,517	2,115,543	4,272,060
9 ROCKLAND TECH. INC.	0	6,100	6,100	0	11,300	11,300
<b>Total</b>	<b>107,397</b>	<b>44,633</b>	<b>152,030</b>	<b>2,156,524</b>	<b>2,217,488</b>	<b>4,374,012</b>

**Air Quality Attainment Status  
(as of 1994)\***

ozone - nonattainment (severe)  
carbon monoxide - attainment or unclassifiable  
particulates - unclassifiable  
lead - unclassifiable  
NO2 - cannot be classified or better than national standards  
SO2 - attainment

\* no changes in designations occurred between 1994 and 1996

---

**Plant-Community Profile:  
General Motors  
Wilmington DE**

12/2/97

---

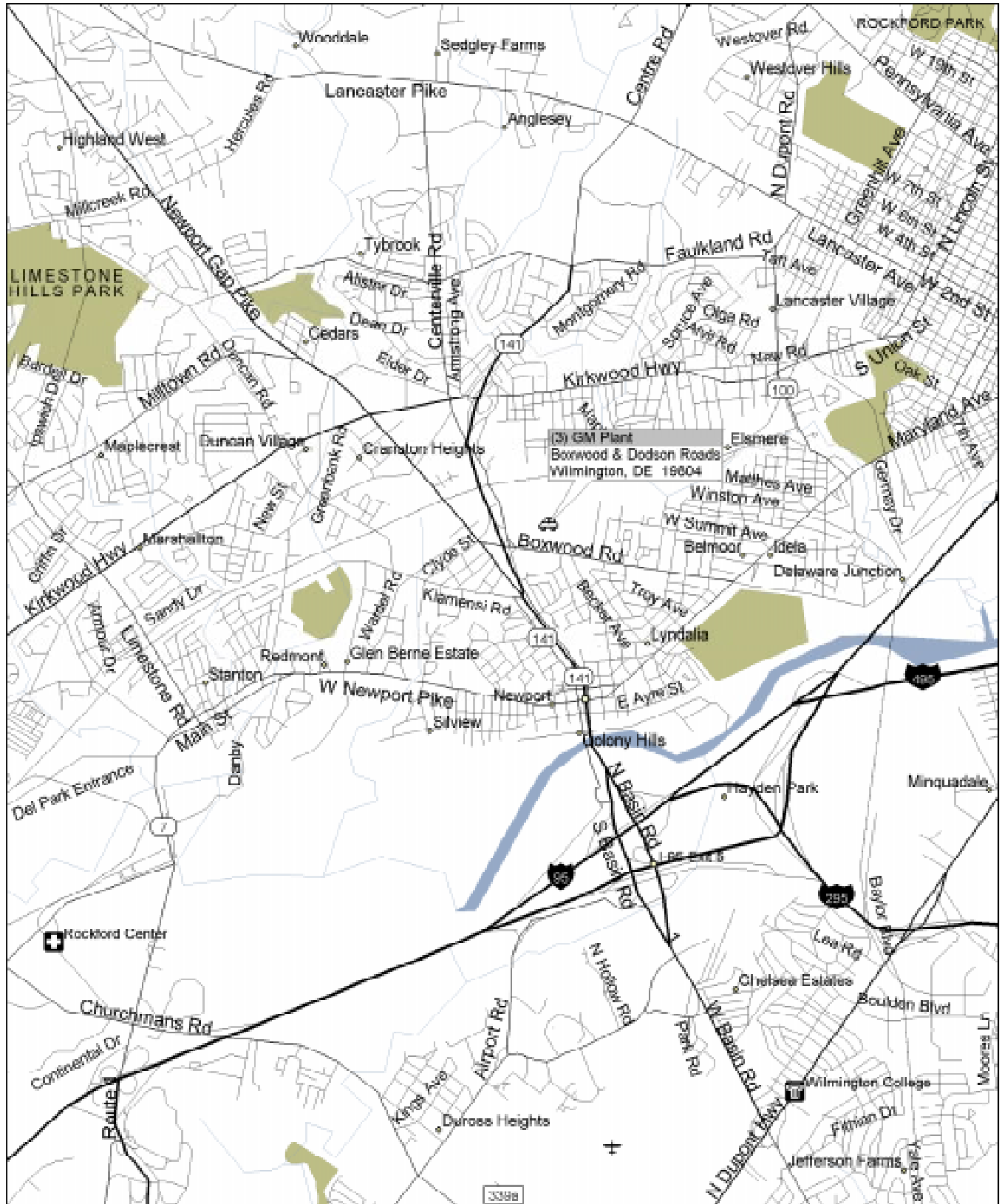
**COMMUNITY DEMOGRAPHIC AND ECONOMIC CHARACTERISTICS**

	<i><b>Census Block</b></i>	<i><b>0-1 Mile</b></i>	<i><b>0-3 Miles</b></i>	<i><b>1-3 Miles</b></i>	<i><b>3-5 Miles</b></i>	<i><b>County</b></i>	<i><b>State</b></i>	<i><b>U.S.</b></i>
Total Population (1994)	NA	NA	NA	NA	NA	464,257	707,296	260,340,990
Total Population (1990)	989	17,682	103,037	85,355	87,182	441,946	666,168	248,709,873
% Change 1990-1994	NA	NA	NA	NA	NA	5	6	5
Total Area (sq. mi.) (1990)	<1	3.1	28.2	25.1	50.2	426.3	1,954.6	3,536,278.1
Population/sq. mi. (land area) (1990)	2,170	6,154	4,297	4,044	1,994	1,037	341	70
Median Household Income (1994)						NA	35,873	32,264
Median Household Income (1989)						38,617	34,875	30,056
% Change 1979-1989 (constant \$)						17	17	7
% Change 1989-1994 (constant \$)						NA	3	7
Per Capita Personal Income (1993)						24,320	21,852	20,800
Per Capita Personal Income (1989)						20,774	18,867	17,690
% Change 1989-1993 (current \$)						17	16	18
Minority Percentage (1990)	5	24	28	28	21	19	19	20
Pct. of Households Below Poverty Level (1989)	2	21	17	17	10	19	19	20
Pct. Not Completing High School (1990)	36	28	24	23	15	18	21	25
Total Employment (1994) (civilian nonfarm)						248,779	384,000	131,056,000
Unemployment Rate (1994)						5	5	6
Manufacturing Employment (1993)						46,864	64,506	18,183,381
Mfgr. as % Total Employment (1993)						21	21	19
Manufacturing Employment (1992)						NA	67,000	18,253,000
Production Workers (1992)						NA	31,000	11,654,000
% Change in Mfgr. Employment 1987-1992						NA	2	-4
Assembly Plant as % Total Mfgr. Workers						6		

---

Data sources used were not always complete or current.  
Attempts have been made to verify data, but errors may still exist.

## Wilmington, DE, GM Plant



Streets98

GENERAL MOTORS CORP  
BOXWOOD & DODSON RDS  
WILMINGTON DE  
Tri Number: 19899CPCWLPOBOX

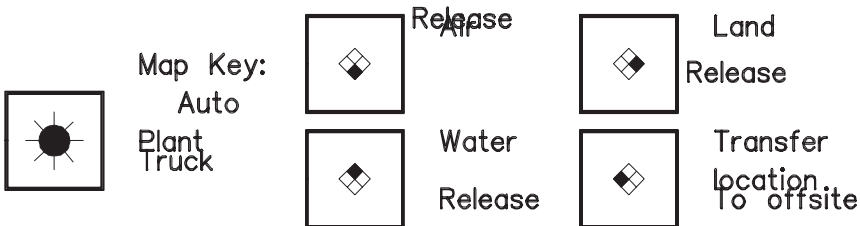
Map #	SIC	Name	Address	City	State
0	3711	GMC NAO WILMINGTON PLANT	BOXWOOD & DODSON ROADS	WILMINGTON	DE
1	2821	HERCULES INC. RESEARCH CENTER	500 HERCULES RD.	WILMINGTON	DE
2	3061	GATES ENG. CO. INC. INC.	100 SOUTHWEST ST.	WILMINGTON	DE
3	2759	KAUMAGRAPH CORP.	400 S. MADISON ST.	WILMINGTON	DE
4	3500	DU PONT EDL WILMINGTON SHOPS EDL WILMINGTON SHOPS	101 BEECH ST.	WILMINGTON	DE
5	3083	AMETEK INC. HAVEG DIV.	900 GREENBANK RD.	WILMINGTON	DE
7	3089	MEDAL LP	305 WATER ST.	NEWPORT	DE
8	2865	CIBA-GEIGY CORP. PIGMENTS DIV.	205 S. JAMES ST.	NEWPORT	DE
9	2899	ROCKLAND TECH. INC.	538 FIRST STATE BLVD.	NEWPORT	DE



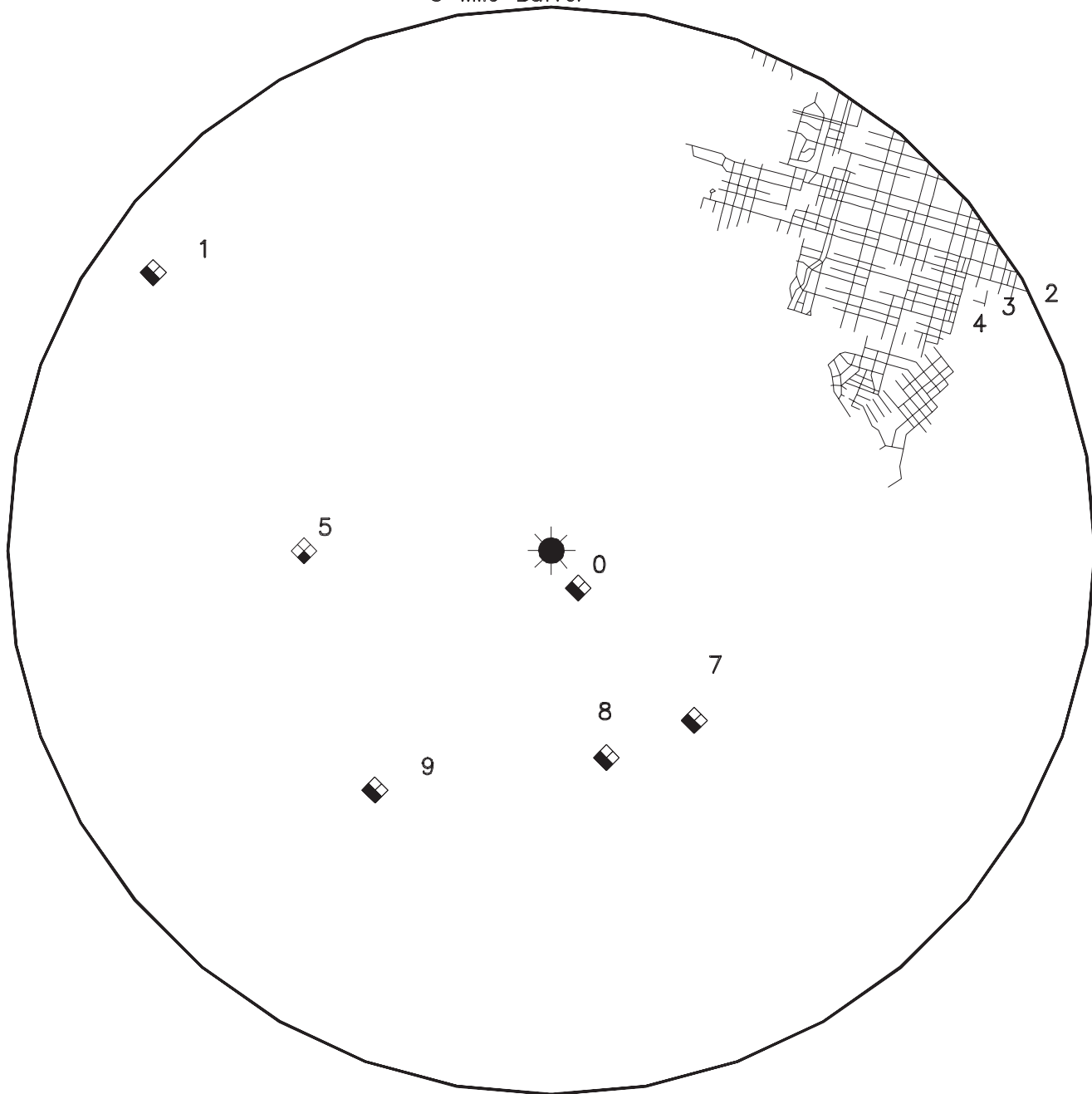
# AREA WIDE 1994 TRI EMISSION PROFILE

GENERAL MOTORS CORP  
NEW CASTLE COUNTY, Delaware

Latitude: 39 43 29  
Longitude: 75 36 32



3 Mile Buffer



Number without a Symbol denotes no reported emissions over 0.5 pounds per year



1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF  
GENERAL MOTORS CORP TRI NO: 19899CPCWLPOBOX

Chemical Name	Air Fugitive (Non-Point Source) Emissions	Air Stack (Point Source) Emissions	Discharge to Surface Water	On-Site Land Disposal	TOTAL RELEASES	Discharge to POTW	Transfer	TOTAL TRANSFERS
DU PONT EDL WILMINGTON SHOPS EDL WILMINGTON SHOPS 101 BEECH ST. WILMINGTON DE 19880 0840			SIC DESCRIPTION: SIC CODE: 3500				MAP LOCATION NO:	4
SUBTOTALS	0	0	0	0	0	0	0	0
AMETEK INC. HAVEG DIV. 900 GREENBANK RD. WILMINGTON DE 19808			SIC DESCRIPTION: SIC CODE: 3083	LAMINATED PLASTICS PLATE/SHEET			MAP LOCATION NO:	5
FORMALDEHYDE	11	0	0	0	11	2	0	2
PHENOL	90	3	0	0	93	5	0	5
HYDROCHLORIC ACID	21	131	0	0	152	0	0	0
SUBTOTALS	122	134	0	0	256	7	0	7
MEDAL LP 305 WATER ST. NEWPORT DE 19804			SIC DESCRIPTION: SIC CODE: 3089	PLASTICS PRODUCTS, NEC			MAP LOCATION NO:	7
METHANOL	0	14,000	0	0	14,000	0	33,000	33,000
FREON 113	0	8,400	0	0	8,400	0	4,800	4,800
SUBTOTALS	0	22,400	0	0	22,400	0	37,800	37,800
CIBA-GEIGY CORP. PIGMENTS DIV. 205 S. JAMES ST. NEWPORT DE 19804 2490			SIC DESCRIPTION: SIC CODE: 2865	CYCLIC CRUDES INTERM., DYES			MAP LOCATION NO:	8
ANILINE	505	99	0	0	604	98,105	12,592	110,697
METHANOL	102,651	13,852	0	0	116,503	2,005,635	1,979,271	3,984,906
BIPHENYL	3,523	540	0	0	4,063	52,772	115,663	168,435
XYLENE (MIXED ISOMERS)	515	5	0	0	520	5	8,017	8,022
SUBTOTALS	107,194	14,496	0	0	121,690	2,156,517	2,115,543	4,272,060

1994 TRI EMISSIONS (LB/YEAR) AT FACILITIES WITHIN THREE MILES OF  
GENERAL MOTORS CORP TRI NO: 19899CPCWLPOBOX

Chemical Name	Air Fugitive (Non-Point Source) Emissions	Air Stack (Point Source) Emissions	Discharge to Surface Water	On-Site Land Disposal	TOTAL RELEASES	Discharge to POTW	Transfer	TOTAL TRANSFERS
ROCKLAND TECH. INC.			SIC DESCRIPTION:	CHEMICALS & CHEM PREP, NEC			MAP LOCATION NO:	9
538 FIRST STATE BLVD.			SIC CODE: 2899					
NEWPORT	DE 19804							
METHANOL	0	6,100	0	0	6,100	0	11,300	11,300
SUBTOTALS	0	6,100	0	0	6,100	0	11,300	11,300

# General Motors Wilmington New Castle County, Delaware

Latitude: 39 43 29 N  
Longitude: 75 36 32 W

MAP KEY:

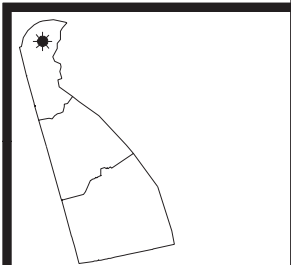
- County Boundaries
- Inter State Highway
- US Highway
- Rail Road
- One Mile
- Three Miles
- Five Miles

POPULATION DENSITY / SQ. MILE

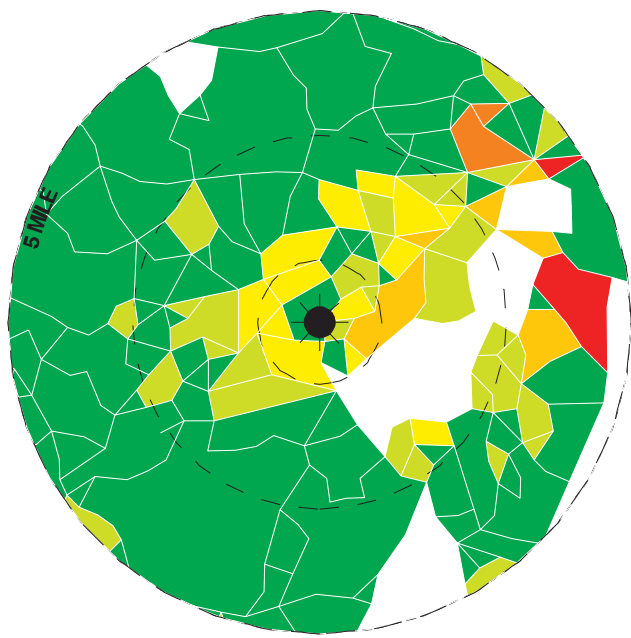
- Greater than 10000
- 1000 - 10000
- 100 - 1000
- 10-100
- 1-10

Minority, poverty, and High School Incomplete percentages

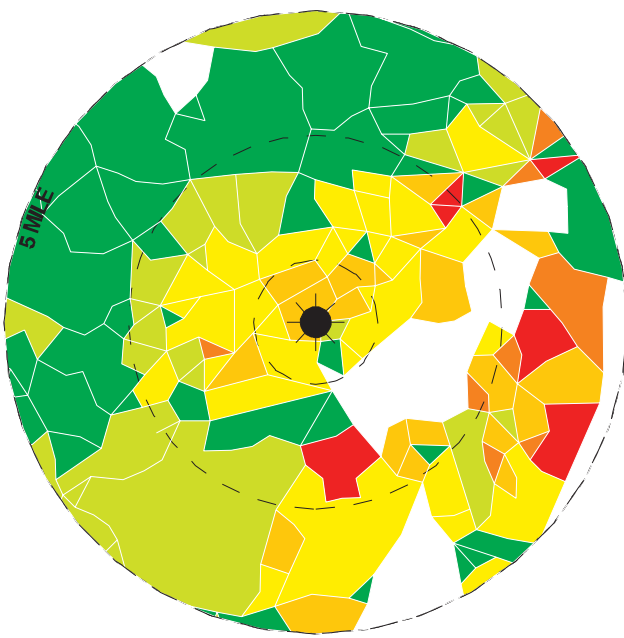
- Greater than 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10



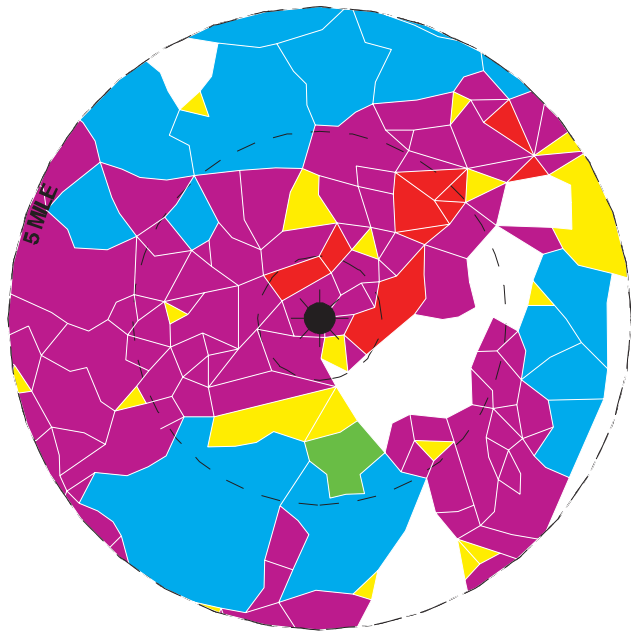
Percentage of Total Population Below Poverty Level



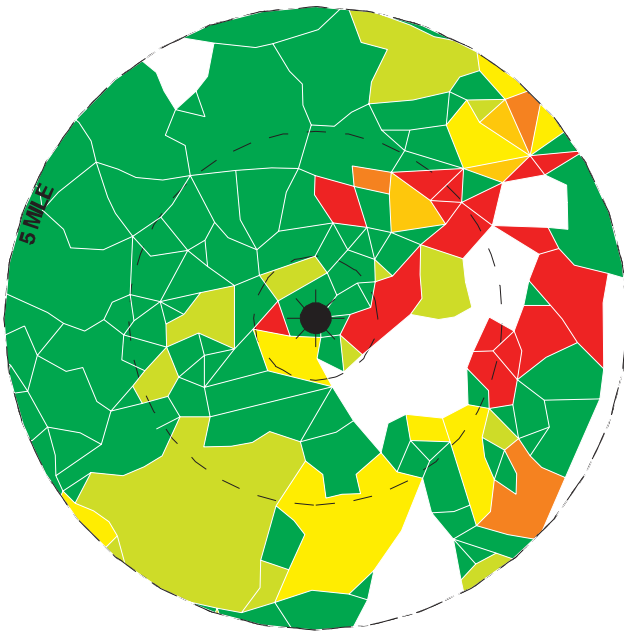
Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population



# General Motors Wilmington New Castle County, Delaware

Latitude: 39 43 29 N  
Longitude: 75 36 32 W

MAP KEY:

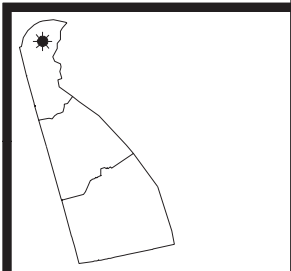
- County Boundaries
- Inter State Highway
- US Highway
- Rail Road
- One Mile
- Three Miles
- Five Miles

POPULATION DENSITY / SQ. MILE

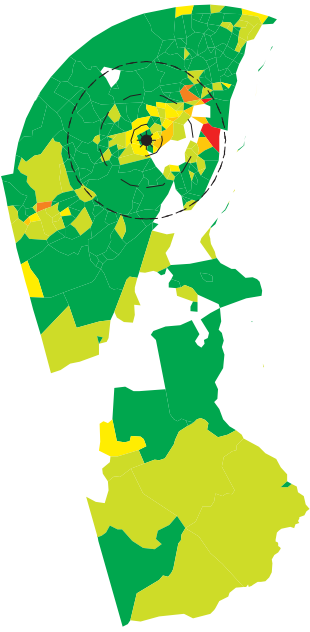
- Greater than 10000
- 1000 - 10000
- 100 - 1000
- 10-100
- 1-10

Minority, poverty, and High School Incomplete percentages

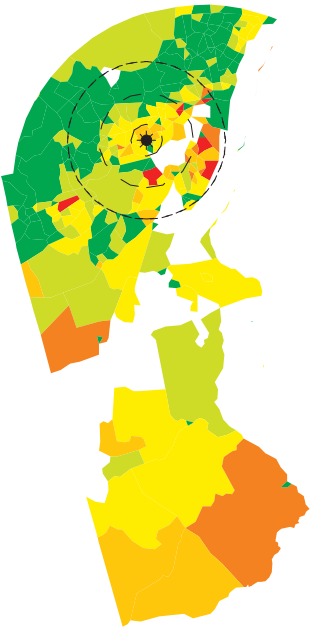
- Greater than 50
- 40 - 50
- 30 - 40
- 20 - 30
- 10 - 20
- 0 - 10



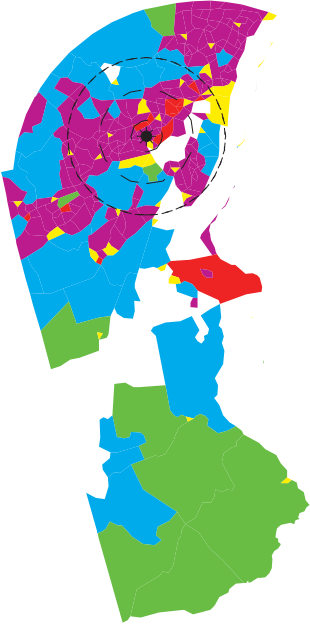
Percentage of Total Population Below Poverty Level



Percentage of Population not Completing High School



Population Density People Per Sq. Mile



Minority Population Percent of Total Population

